

The definition of biophysics

Max A. Lauffer, Editor 1969–1973

Andrew Mellon Professor Emeritus of Biophysics, Department of Biological Science, University of Pittsburgh,
Pittsburgh, PA 15260 USA

Biophysics has never been adequately defined. It was my hope when I assumed the editorship of the *Biophysical Journal* in 1969 that I could make the Journal an instrument for defining the field. To my sorrow, Biophysics is still undefined in 1990.

Why did I and editors before me and after me not succeed in defining the discipline? Part of the reason might have been inadequate organization of the editor's office, then and now. However, a major factor must be the nature of biophysics. However undefined it might be, it is clear that biophysics has interface with not just one but many somewhat related disciplines: physiology with its many subdisciplines, cell biology, biochemistry, molecular biology, and others, some unknown. Almost every biophysicist is also an active member of some other professional specialty. Yet, if the *Biophysical Journal*

could attract and publish worthy articles from all of the varieties of biophysicist, it could define a common core. Certainly one of the reasons this is difficult is that alternative opportunities for publication in first rate journals are greater in branches of biophysics interfacing with certain related disciplines than with others. The result is an unbalanced submission and ultimately publication of papers from the various component fields. Whatever definition results is necessarily skewed.

What can be done about it? The editor's office can be reorganized with associate editors representing various fields. The trouble with this is that it presupposes knowledge of which fields to cover, in essence, a definition of biophysics. Another possibility is to continue the development of the *Biophysical Journal* into a highly prestigious publication, one so prestigious that every biophysicist will submit the best manuscripts, whatever the related field and regardless of the availability of alternative journals, to the *Biophysical Journal*. Much progress has been achieved; may present and future editors reach the goal!

Dr. Lauffer's current address is 190 Lauffer Rd., Middletown, PA 17057.